

Plant Species of Special Concern and Plant Associations of Sheridan County, Montana

Prepared for:

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Prepared by:

Bonnie Heidel, Stephen V. Cooper, and Catherine Jean

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Executive Summary

Inventory was conducted in Sheridan County for plant associations and plant species of special concern. Forty-two plant associations are known from the county, of which five are described for the first time, and another nine are documented for the first time in Montana, in addition to information gathered on 15 undescribed types that are under review. They include highly productive grasslands, wet meadows, and sandhill plant associations that are significant within Montana, and may be of significance in the United States or the Great Plains as a whole.

Fifteen plant species of special concern or watch species are known from the county, of which eight were documented for the first time, and one is restricted to the county. Almost all of the plant species of special concern are restricted to wet meadow or sandy habitats. For almost half of the 15 species, Sheridan County populations represent the largest known population in Montana. They are rare strictly from a state perspective, though some may be vulnerable to rangewide decline.

This study also identified areas of high quality vegetation and concentrations of different plant species of special concern and plant associations. The Missouri Coteau and the Medicine Lake areas at the eastern end of Sheridan County have the greatest diversity of high quality plant associations and the highest numbers and concentrations of special concern plant species in the county, in part because they encompass the most extensive and diverse wetland habitats. Upper reaches of the Big Muddy valley and tributaries are also intact in places and significant for their plant associations.

The alkali lake systems, sandhills, and prairie pothole mosaic of wetlands and grasslands in Sheridan County are some of the largest identified in eastern Montana. Range management, noxious weed control, and related grassland/wetland conservation measures are important to their long-term management.

The compiled information is offered as a reference to:

- Identify management opportunities for maintaining rare species and high quality natural vegetation on public lands,
- Re-evaluate plant species and natural vegetation types as they do or do not actually warrant consideration as features of special concern, and
- Profile biological features and areas unique to the county for consideration in watershed coordination and countywide planning.